

Suicide

Summary of Methods and Data for Estimate of Costs of Illness

- | | |
|---|-----------------|
| 1. Estimated Total Economic Cost | Not Available |
| Estimated Direct Cost | Not Available |
| Estimated Indirect Cost | \$ 10.2 billion |
| Reference Year | 1985 |
| IC Providing the Estimate | NIMH |
| | |
| Direct Costs Include: Other related nonhealth costs | No |
| Indirect Costs Include: | |
| Mortality costs | Yes |
| Morbidity costs: Lost workdays of the patient | Not Applicable |
| Morbidity costs: Reduced productivity of the patient | Not Applicable |
| Lost earnings of unpaid care givers | Not Available |
| Other related nonhealth costs | Not Available |
| Interest Rate Used to Discount Out-Year Costs | 6 % |
| | |
| 2. Category code(s) from the International Classification of Diseases, 9th Revision, Clinical Modification, (ICD-9-CM) for all diseases whose costs are included in this estimate: <u>E950-E959</u> . | |
| | |
| 3. Estimate Includes Costs: | |
| Of related conditions beyond primary, strictly coded ICD-9-CM category | No |
| Attributable to the subject disease as a secondary diagnosis | No |
| Of conditions for which the subject disease is an underlying cause | No |
| 4. Population Base for Cost Estimate (Total U.S. pop or other) | Total U.S. pop. |
| 5. Annual (prevalence model) or Lifetime (incidence model) Cost: | Annual |
| 6. Perspective of Cost Estimate (Total society, Federal budget, or Other) | Total Society |
| 7. Approach to Estimation of Indirect Costs | Human Capital |
| | |
| 8. <u>Source of Cost Estimate</u> : (Reference published or unpublished report, or address and telephone of person/office responsible for estimate) | |

D.P. Rice, S. Kelman, L.S. Miller, S. Dunmeyer, 1990. *"The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985*. DHHS Publication #: ADM 90-1694. Washington, D.C., U.S. DHHS. (parent study)

D.P. Rice, S. Kelman, L.S. Miller, 1991. "Estimates of Economic Costs of Alcohol and Drug Abuse and Mental Illness, 1985 and 1988." *Public Health Reports*, 106:280-292.

D.P. Rice and L.S. Miller, 1993. "The Economic Burden of Affective Disorders" in *Research in the Economics of Mental Health*, Eds., T.W. Hu and A. Rupp, pp. 37-53. JAI Press. (Estimates derived from data on p. 47-48 and Table 5 by Agnes Rupp, Ph.D., NIMH, phone: 301-443-4233).

MMWR, 1987. Vol. 36, No. 32(August 21):531-534.

9. Other Indicators of Burden of Disease:

In 1991, suicide was the eighth leading cause of death. The death rate per 100,000 population was 12.2.

Another measure of the burden of suicide is in years of potential life lost (YPLL). In 1984, suicide accounted for 646,000 YPLL. White males had the highest crude rate of YPLL due to suicide (474/100,000). They were followed by males of all other races, except blacks (350/100,000), by black males (303/100,000), and by white females (118/100,000). Suicides committed by firearms accounted for 57% of the total YPLL attributable to suicide.

10. Commentary:

The study by Dr. Rice on the economic burden of affective disorders focuses on depression-related suicide. Approximately 60% of all suicides are depression-related.

In Dr. Rice's estimate of lost productivity due to premature death, the expected value of an individual's future earnings, by gender and age, are taken into account. This estimate also considers life expectancy for different age and gender groups; changing patterns of earnings at successive ages; varying labor force participation rates; an imputed value for house-keeping services; and a 6% discount rate to convert a stream of earnings into its present worth. Dr. Rice estimated that depression-related suicide resulted roughly in 33 person years lost per death; in monetary terms this would be equivalent to a loss of \$345,000 per death (1985). No direct cost (if any) data is available for suicide-related death. The presented total estimate of \$10.2 billion for all suicides assumes that the age/gender distribution of all suicides was similar to affective disorders-related suicides in 1985.